L2: Entry 1 of 3 File: USPT May 13, 2003

US-PAT-NO: 6562618
DOCUMENT-IDENTIFIER: US 6562618 B1

TITLE: Monoclonal antibody against connective tissue growth factor and medicinal uses thereof

DATE-ISSUED: May 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tamatani; Takuya	Kanagawa			JP
Tezuka; Katsunari	Kanagawa			JP
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Takigawa; Masaharu	Okayama			JP

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CLAIMS:

What is claimed is:

1. A non-human monoclonal antibody or a portion thereof selected from the group consisting of F(ab')2, Fab, Fab', Fv, sFv, dsFv and dAb, which (a) binds to human, mouse and rat connective tissue growth factors (CTGFs) and (b) has the IgG isotype.

2. The non-human monoclonal antibody or a portion thereof according to claim 1, wherein said antibody inhibits the binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL 1573).

3. The non-human monoclonal antibody or a portion thereof according to claim 1, wherein said antibody is a mouse, rat or hamster antibody.

4. The non-human monoclonal antibody or a portion thereof according to claim 3, wherein said antibody inhibits the binding of human CTGF to human kidney-derived fibroblast cell line 293-T (ATCC CRL 1573).

5. A non-human monoclonal antibody which is produced by a hybridoma identified by international deposit accession numbers selected from the group consisting of FERM BP-6208 and FERM BP-6209.

6. A cell producing the non-human monoclonal antibody according to claim 1.

7. The cell according to claim 6, wherein said cell is a hybridoma obtained by fusing a mammalian myeloma cell with a mammalian B cell that produces the non-human monoclonal antibody.

8. A cell identified by international deposit accession numbers selected from the group consisting of FERM BP-6208 and FERM BP-6209.

9. An antibody-immobilized insoluble carrier comprising the non-human monoclonal antibody

according to claim 1 or claim 5.

10. The non-human antibody-immobilized insoluble carrier according to claim 9, wherein said insoluble carrier is selected from the group consisting of plates, test tubes, tubes, beads, balls, filters and membranes.

11. The non-human antibody-immobilized insoluble carrier according to claim 9, wherein said insoluble carrier is a filter or membrane, for affinity column chromatography.

12. A labeled antibody comprising the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5 that is labeled with a labeling agent that provides a detectable signal.

13. The labeled non-human antibody according to claim 12, wherein said labeling agent is an enzyme, fluorescent substance, chemiluminescent substance, biotin, avidin, or radioisotope.

14. A kit for detecting or assaying mammalian CTGF, comprising the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5.

15. A kit for detecting or assaying mammalian CTGF comprising an antibody-immobilized insoluble carrier which comprises the non-human monoclonal antibody according to claim 1 or claim 5.

16. A kit for detecting or assaying mammalian CTGF comprising a labeled antibody which comprises the non-human monoclonal antibody or a portion thereof according to claim 1 or the non-human monoclonal antibody according to claim 5 that is labeled with a labeling agent that provides a detectable signal.

17. A kit for purifying mammalian CTGF, comprising an antibody-immobilized insoluble carrier which comprises the non-human monoclonal antibody according to claim 1 or claim 5.

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US-CL-CURRENT: 435/326; 424/133.1, 424/135.1, 424/145.1, 435/328, 435/346, 435/70.21, 435/810, 530/387.3, 530/388.15, 530/388.24, 530/391.1, 530/391.3

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